ABSTRACT OF THE DISCLOSURE

An acceleration sensor which has a vibrator, a weight portion that is connected to the vibrator, and supported at a position different from the center of gravity of the vibrator plus its own structure, and a detecting section which detects the amount of characteristic corresponding to an angular moment that is exerted in the vibrator upon application of an acceleration in one direction to the vibrator and the weight portion. When an acceleration in one direction is applied to the vibrator and the weight portion connected thereto, an angular moment is exerted in the vibrator due to the difference between the supporting point of the weight portion and the center of gravity of the vibrator plus the weight portion, and the amount of characteristic corresponding to the angular moment is detected by the detecting section so that the acceleration of a linear motion is detected.